

WHAT IS CLAIMED IS:

1. A method of treating a patient, comprising the steps of:
transluminally advancing a prosthesis into the coronary sinus;
manipulating the prosthesis to exert a compressive force on the mitral valve annulus;
monitoring hemodynamic function to assess mitral valve regurgitation; and
adjusting the prosthesis in response to the monitoring step.
2. A method as in Claim 1, further comprising the step of percutaneously accessing the venous system prior to the transluminally advancing step.
3. A method as in Claim 2, wherein the accessing step is accomplished by accessing one of the internal jugular, subclavian or femoral veins.
4. A method as in Claim 1, wherein the manipulating step comprises axially moving a forming element with respect to the prosthesis, to bend the prosthesis.
5. A method as in Claim 1, wherein the transluminally advancing step is accomplished using a catheter.
6. A method as in Claim 1, further comprising the step of locking the prosthesis to retain a compressive force on the annulus following the adjusting step.
7. A method as in Claim 6, wherein the locking step comprises moving an engagement surface from a disengaged configuration to an engaged configuration.
8. A method as in Claim 6, wherein the locking step comprises providing an interference fit.
9. A method as in Claim 6, wherein the locking step comprises providing an adhesive bond.
10. A method as in Claim 6, wherein the locking step comprises providing a knot.
11. A method as in Claim 6, wherein the locking step comprises providing a compression fit.
12. A method as in Claim 1, further comprising the steps of first measuring the coronary sinus and then selecting an appropriately sized prosthesis prior to the advancing step.

13. A method as in Claim 1, wherein the step of monitoring hemodynamic function is accomplished using transesophageal echo cardiography.

14. A method as in Claim 1, wherein the step of monitoring hemodynamic function is accomplished using surface echo cardiographic imaging.

15. A method as in Claim 1, wherein the step of monitoring hemodynamic function is accomplished using intracardiac echo cardiographic imaging.

16. A method as in Claim 1, wherein the step of monitoring hemodynamic function is accomplished using fluoroscopy with radiocontrast media.

17. A method as in Claim 1, wherein the step of monitoring hemodynamic function is accomplished using left atrial or pulmonary capillary wedge pressure measurements.

18. A method as in Claim 1, further comprising the step of determining an ongoing drug therapy taking into account post implantation hemodynamic function.

19. A method of remodeling a mitral valve annulus to reduce mitral valve regurgitation, comprising the steps of:

- providing a prosthesis which is adjustable between a first configuration for positioning adjacent the mitral valve annulus and a second configuration for exerting a compressive force against the mitral valve annulus;

- advancing the prosthesis to a position adjacent the mitral valve annulus;

- manipulating the prosthesis to reduce mitral valve regurgitation;

- monitoring the degree of regurgitation; and

- adjusting the prosthesis in response to the monitoring step.

20. A method of remodeling a mitral valve annulus as in Claim 19, wherein sufficient tightening is accomplished to achieve at least a one grade reduction in regurgitation.

21. A method as in Claim 19, further comprising the step of percutaneously accessing the venous system prior to the transluminally advancing step.

22. A method as in Claim 21, wherein the accessing step is accomplished by accessing one of the internal jugular, subclavian or femoral veins.

23. A method as in Claim 19, wherein the tightening step comprises axially moving a forming element with respect to the prosthesis, to bend the prosthesis.

24. A method as in Claim 19, further comprising the step of locking the prosthesis to retain a compressive force on the annulus following the tightening step.

25. A method as in Claim 24, wherein the locking step comprises moving an engagement surface from a disengaged configuration to an engaged configuration.

26. A method as in Claim 24, wherein the locking step comprises providing an interference fit.

27. A method as in Claim 24, wherein the locking step comprises providing an adhesive bond.

28. A method as in Claim 24, wherein the locking step comprises providing a knot.

29. A method as in Claim 24, wherein the locking step comprises providing a compression fit.

30. A method as in Claim 19, further comprising the steps of first measuring the coronary sinus and then selecting an appropriately sized prosthesis prior to the transluminally advancing step.

31. A method as in Claim 19, wherein the monitoring step is accomplished using transesophageal echo cardiography.

32. A method as in Claim 19, wherein the monitoring step is accomplished using surface echo cardiographic imaging.

33. A method as in Claim 19, wherein the monitoring step is accomplished using intracardiac echo cardiographic imaging.

34. A method as in Claim 19, wherein the monitoring step is accomplished using fluoroscopy with radiocontrast media.

35. A method as in Claim 19, wherein the monitoring step is accomplished using left atrial or pulmonary capillary wedge pressure measurements.

36. A method as in Claim 19, further comprising the step of determining an ongoing drug therapy taking into account post implantation hemodynamic function.

37. A method as in Claim 36, comprising measuring residual regurgitation following implantation and formulating an ongoing drug therapy taking into account the residual regurgitation.